

THE ELECTRICAL WORLD

CONQUERING OLD AGE.

Keeping Young by High-Frequency Electric Currents.

A method of retarding the approach of old age by treatment with high-frequency electric currents is reported in the Medical Times by Dr. Samuel Tracy of New York. In Dr. Tracy's opinion, senility is a natural process, and should come on gradually and painlessly. Owing to inheritance or predisposition, as well as to the strenuous modern life, it creeps up before we are aware of it, and this is the time for the physician to protect his patient. When a man begins to get old, says Dr. Tracy, much can be accomplished to retard the symptoms. He goes on:

"It is admitted by many of our profession that arteriosclerosis (with loss of elasticity in the walls of the arteries) is really the beginning of old age. The changes in the wall of the blood vessel are said to be due to hypertension and to vitiated blood. The condition of the blood is due to autoinfection and the floating in the blood stream of waste materials.

"The waste material found in the blood is due to overeating, excessive drinking of alcohol, and autoinfection. In the latter case the chemistry of the system is unbalanced. There is more waste than repair; the organs which preside over elimination of waste material being overtaxed are unable to efficiently take care of the excess, and consequently some waste material floats in the bloodstream, acting as a poisonous substance, vitiating the rivers of life, and degenerating the river beds.

"When arteriosclerosis has manifested itself by hypertension in the blood vessels, strong emotions, excessive mental excitement, or physical strain is likely to endanger life by a sudden rupture of a small vessel in the brain.

"An artery of the body can be compared with a flexible rubber tube, used for a droplight, and filled with illuminating gas. Continual overpressure of gas within the tube will affect the walls of the tube, and diminish its elasticity. If the tube is slightly damaged or obstructed, increased pressure of gas may cause a rupture in the inner wall of the tube. To make the tube do good practical work it is absolutely necessary to moderate the pressure of the gas.

"So it is with our arteries. When arteriosclerosis first makes its appearance we must reduce the pressure in the blood vessel.

"While old age cannot be prevented, we have agencies at our disposal which will materially assist in retarding it, and in making its symptoms more comfortable. These agencies are high-frequency electric currents, diet, and hygiene. The physiological effects of high-frequency current are due to the spark, or condenser effect, which produces mechanical effect on the tissue, an increased heat in the body, and the formation of ozone and ultraviolet light. The local action is accomplished by a general reaction, the blood pressure is lowered, and combustion through the lungs is increased. The eliminative processes are generally stimulated.

Braking an Auto.

Braking an automobile by means of the engine instead of with the regular set of brakes is at times particularly desirable, according to many automobile manufacturers.

NICKEL PLATING.

How the Process Can Be Managed Without an Electric Current.

A light coat of nickel may be deposited upon brass and copper articles without the use of the electric current. The deposit is hardly sufficient to stand heavy buffing, but it may be lightly treated without cutting through.

A solution is made up as follows:

Water.....gal. 1
Double Nickel Salts.....lb. 1
Sulphuric acid.....oz. 4

The salts are dissolved in the water, and the whole is then heated nearly to boiling, says the Brass World. The brass or copper articles are immersed in the solution and some piece of aluminum are placed in it so that they come in contact with the brass or copper. The aluminum may be in the form of sheet scrap or granulated. A few pieces only are necessary.

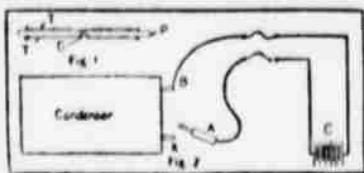
Gas is given off from the aluminum and within a minute the article will become covered with a white coat of nickel. In a few minutes a fairly

SHORT-CIRCUITED CONDENSER.

How It Can Easily Be Cleared and Restored to Perfect Order.

The accompanying diagram shows how to apply the electric current to a condenser that may have become short-circuited by the tinfoil, through a defect in the paper insulation, making a contact one sheet with the other, as shown in Fig. 1.

Connect the contact point, A, Fig. 2, to one side of the source of current and the wire, B, to the other side, connecting this wire to the condenser as shown. Then by means of attaching the contact point, A, to the condenser



Cleaning Out a Condenser.

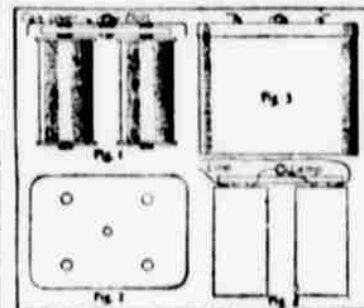
terminal, X, you will succeed in burning out the short-circuited portion of the condenser, says Telephony. Be sure to insert a fuse wire between the contact point and the source of current, which will blow out at about five amperes, and it is well to simply make passing contacts between A and X until you have observed that the short-circuited portion has been cleared. C represents the source of electric current, which may be the regular 20 or 40-volt storage battery or it may be a 110-volt lighting circuit. Either system will serve so long as it is a source of direct current.

In Fig. 1 is shown the tinfoil, T, and the paper insulation, P. D shows the defect in the paper where the tinfoil has forced itself through. In contact with another sheet. It is this contact point which is burnt out when you "flash" the condenser in the manner described.

FOR AMATEUR ELECTRICIAN.

How to Make a 110-Volt Transformer That Will Work.

Secure two magnets from a telephone bell, or a set of magnets wound for 2,000 ohms. Mount them on a bar



Parts of the Transformer.

of brass or steel as shown in Fig. 1. Get an empty cocoa can and clean it good to remove all particles of cocoa and punch five holes in the cover, as shown in Fig. 2. The middle hole is to be used to fasten the cover to the brass bar with a bolt. The other four holes are for wire terminals. A piece of rubber tubing must be placed over the wire terminals before inserting them in the holes. Fill the can with crude oil, or with any kind of oil except kerosene oil, and immerse the magnets in it by fitting the cover on tight (Fig. 3). The connections are made as shown in the diagram, Fig. 5, says Popular Mechanics. This device may be used on 110-volt current for electroplating and small battery lamps, provided the magnets are wound with wire no larger than No. 40.

No Danger.

Clergyman—My child, beware of picking a toadstool instead of a mushroom. They are easy to confuse.

Child—That be all right, sir, that be. 'Us bain't askin' to eat 'em ourselves; they're a-going to market to be sold.—Royal Magazine.

heavy deposit will have been produced.

The nickel deposit is not quite as white as that obtained by electro-deposition from a good nickel solution, but it is the equal of an ordinary grade. It has a dark shade resembling the nickel obtained in an alkaline plating solution.

Saws Without Teeth.

An explanation of the manner in which a soft steel disk revolving at a high velocity cuts hard steel has recently been sought with the aid of microscope inspection. The result corroborates the view hitherto held that the material acted upon is heated at the place of contact to the fusing point and then brushed away. The high temperature appears to be confined very narrowly to the point of contact, so that a thin gash is cut. The temperature of the revolving disk does not rise so high, because of the large surface area of the disk. The part of the disk in contact is continually changing, while the frictional energy is concentrated on a very small area of the material subjected to its action.

FRUIT SALADS NOW

DAY OF DELICIOUS COMBINATION IS HERE.

Strawberry Makes Excellent Combination with Nearly Every Other Fruit on the List—Apple with Celery and Mayonnaise.

The strawberry brings to the mind of dainty cooks the delicious fruit salads that they have loved long since and lost awhile in favor of vegetable and meat concoctions.

The English do not combine the fruit and vegetable salads as the French chefs do, and the best American cooks are tending to keep the fruit salad as a dainty dish by itself, which can almost take the place of ice or sweets on the spring and summer lunch table.

Strawberries are delicious in fruit salad, and strange as it seems to meet this familiar fruit on the table without the usual accompaniment of cream and sugar, it is very popular in the new form and is combined with nearly every other fruit in the list.

A grapefruit is especially good with strawberries. The core and fiber of the grapefruit is removed after the fruit has been halved, the pulp being loosened from the sides in the usual manner. The berries are then placed in the center and the whole is allowed to remain on ice until very cold. A French dressing is added at the table.

Apples combine with nearly every other fruit, but are best with celery and mayonnaise, this being one of the first fruit salads to win favor several seasons ago, and known as Waldorf salad.

A pretty way to serve it is to scoop out the inside of a red-checked apple without injuring the outside form of the fruit. Then replace the apple chopped with celery, the core parts being entirely removed. When apple blossoms are procurable they form a dainty decoration for the open part of the apple.

Cucumbers may be opened carefully and filled the same way, with a mixture of apple and chopped nuts, the cucumber pulp being used and the shell neatly resealed so as to present the appearance of being untouched. The cucumbers should be packed in a bed of fresh ice-cubes and chopped ice.

Fruit salads can be effectively served in glass punch cups, packed in shaved ice in the high glasses sometimes used for grapefruit. A geranium or mint leaf is rubbed on the glass by some cooks, and in fact, their fancy has free play in concocting these dainty dishes.

Inexpensive Cream Cake.

Cream one rounding tablespoonful of butter with one cupful of sugar, add one beaten egg, one cupful of milk and two cupfuls of flour sifted twice with four level teaspoonfuls of baking powder and one-half teaspoonful of vanilla. Bake in three layer cake tins. Spread with a cooked filling, for which beat one egg and one-half cupful of sugar together; add one-quarter cupful of flour made smooth in a little milk to one cupful of hot milk and cook six minutes. Stir in the egg and sugar and when it thickens add flavoring. Cool before using.

Bundkuchen.

To one pint of milk add a cake of compressed yeast and dissolve thoroughly. Sift 1½ pounds flour, make hole in center and pour in milk and yeast. Stir into a stiff batter, throw a handful of flour over it and set aside to rise. Take one-third pound butter, four eggs, one cup sugar, one cup raisins and a pinch of grated nutmeg, teaspoon of salt and grated rind of a lemon. When the sponge is light put in the butter, warmed, and the rest of ingredients in order given. Mix well with large spoon. Put in pans and let rise. This will make two small loaves.

Sweetbreads with Mushrooms.

Boil the sweetbreads carefully for three-quarters of an hour; pick them apart, rejecting the membrane; drain and chop fine and take one can of mushrooms, mash them together and let them stand in the refrigerator for two hours. Put two tablespoonfuls of butter and two of flour in a chafing dish, add one pint of milk and stir until the sauce thickens. Add to the sweetbreads and mushrooms a teaspoonful of salt and a half-spoonful of pepper. Serve when hot.

Tomato Pie.

Chop fine any bits of cold meat, several different kinds will make the dish more tasty. Line a dish with bread crumbs, then put in a layer of the meat, well seasoned, and a few bits of butter, then a layer of tomatoes. Then more crumbs, meat, tomatoes, etc., until all materials are used. Add any gravy left over, to moisten, or make a little stock from the meat bones, as the pies should be as moist as a scallop. Bake in a hot oven until nicely browned.



GATHERED SMILES

PROGRESSIVE CONUNDRUMS.

DISAPPOINTED HER.

"Miss Gracie," he said, with an engaging smile, "did you ever try your hand at one of these progressive conundrums?"

"What is a progressive conundrum, Mr. Spoonamore?" inquired the young lady.

"Haven't you heard of them? Here is one: Why is a ball of yarn like the letter 't'? Because a ball of yarn is circular, a circular is a sheet, a sheet is flat, a flat is \$10 a month, \$10 a month is dear, a deer is swift, a swift is a swallow, a swallow is a taste, a taste is an inclination, an inclination is an angle, an angle is a point, a point is an object aimed at, an object aimed at is a target, a target is a mark, a mark is an impression, an impression is a stamp, a stamp is a thing stuck on, a thing stuck on is a young man in love, and a young man in love is like the letter 't' because he stands before it." Miss Gracie.

"I don't think you have the answer quite right," said the young lady. "A ball of yarn is round, a round is a steak, a steak is a wooden thing, a wooden thing is a young man in love, and a young man in love is like the letter 't' because, Mr. Spoonamore—and she spoke clearly and distinctly—'because he is often crossed'."

The young man understood. He took his hat and his progressive conundrums and vanished from Miss Gracie Garlinghouse's visiting-list for ever.

Why He Liked It.

Mrs. Crimmonbeak—We want a new carpet.

Mr. Crimmonbeak—Well, I saw one down town, today. I'd like to have it.

"What was the pattern?"

"I don't remember, but it had a sign on it, saying: 'This carpet can't be beaten.'—Yonkers Statesman.

Narrow Escape.

Harker—This paper states that the much abused Merry Widow hat will eventually take the masculine eye.

Sportwood—I don't doubt it. One of them came near taking my eye in the shopping district yesterday. Just doigned the hatpin in time.—Chicago Daily News.

MERCENARY LITTLE PUSS.



Elder Sister (who has broken off an engagement and is on with another)—Well, Florrie, who do you like best, Mr. Brown or Mr. Roberts?

Florrie—Well—er—Mr. Roberts. I find that he has a superior taste in chocolates.

Knew What Was Coming.

"George, dear," said his wife, "we're invited to the McDonaids' for dinner to-morrow evening."

"Which, I presume," interrupted George, "is a preface to the old chestnut about you not having a thing to wear?"

Later conversation proved the truth of his surmise.—Detroit Free Press.

A Boy's Wish.

"Pop!"

"Yes, my boy."

"Do you know I'd like to live in India?"

"Well! What put such an idea in your head, my son?"

"Why, this paper says the soap consumption of India is only one ounce a head a year."—Yonkers Statesman.

Never Touched Him.

"John," said the wife of his bosom, "don't you think you ought to save the money you waste on cigars?"

"Not me," replied John. "If I did you would get busy and blow it in some other way."—Chicago Daily News.

Suspicious.

The Waiter—Will you have your cheese served out under the trees, sir?

The Diner—Yes, yes; there's more air out there!

"My dear," said Mr. Wagge, "as I came by Mrs. Gazzam's house just now I saw Mrs. Gazzam in the parlor kissing someone who was not—er—was not Mr. Gazzam."

"Oh, Henry!" gasped Mrs. Wagge. "Are you sure? Well, did you ever?"

"Oh, my! But I've always suspected Mrs. Gazzam. She's much too sanctimonious, you know. Kissing—why, I must call up Mrs. Jorkins on the telephone and tell her all about it. Kissing a—I don't suppose you could see who it was, Henry?"

"Yes," said Mr. Wagge, "I could, quite distinctly."

"You could? Oh, Henry, who was it? Anybody we know?"

"Oh, yes. It was Mrs. Gazzam's mother."

"You—brute!"

FOOZLED, AND WORSE.



The Experienced Caddie (more in sorrow than in anger)—Ain't there no word for it, sir?

After the Honeymoon.

"Boo-hoo!" sobbed Cynthia under her blue sunbonnet. "I don't believe you love me any more."

"Well, do declare," laughed Jason, as he washed the milk pails, "what put that idea into your head, little gal?"

"Why, before our marriage you used to honey me up and say I was as sweet as sweet cider and now you say I am sour."

"Oh, don't worry, pet. Even the sweetest of sweet cider turns to vinegar after a time."—Chicago Daily News.

Foxy Mother.

"Mother, George proposed to me last night."

"Is that so? I guess your father and I had better object to him and then he'll surely marry you."

With such a foxy trick as this being put up for him, there was no chance for George to escape.—Detroit Free Press.

A BLASTED HOPE.



Horace—I cannot help telling you again I love you. Can you not hold out any hope?

Phoebe (wearily)—I did hold out one hope, but that's gone now.

Horace—What was it? I—

Phoebe—I had hoped you wouldn't mention this subject again.

At Home.

Church—He seems perfectly at home on the platform.

Gotham—What is he—a motorman, a conductor or a spellbinder?—Yonkers Statesman.